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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,420	10/22/2003	Ming Shyan Yong	2060-02200	6174

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EXAMINER

CRANE, DANIEL C

ART UNIT	PAPER NUMBER
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3725

DATE MAILED: 02/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/691,420	Applicant(s) YONG ET AL.	
	Examiner Daniel C. Crane	Art Unit 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 and 40-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 44-46 and 48 is/are allowed.
- 6) ☒ Claim(s) 1-38, 40-43 and 47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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BASIS FOR REJECTIONS

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

REJECTION OF CLAIMS ON FORMAL MATTERS

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-38 and 40-43 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1 and 32, the independent claims, specify that the cross section of the strip material is "substantially maintained". It is the examiner's position that this is not an accurate representation of the disclosed operation and, furthermore, goes beyond the original

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disclosure by explicitly describing features that may or may not be performed. Based on applicant's disclosure, there is a thinning of the material strip so as to facilitate bending of the material strip. Accordingly, there is a cross sectional change in the material strip. The amount of thinning or change in the cross section shape of the strip has not been defined; therefore, it is not clear from the original disclosure that the cross section shape is "substantially maintained". New matter has been entered.

REJECTION OF CLAIMS OVER PRIOR ART

Claims 1-4, 6-8, 10, 12, 27 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Creek (2,958,362). See Figures 1, 4, 5 and 7 where the apparatus 37 for forming a curve in material strip 31 is provided with a first member 19 and a second member 11, the first member having a first deforming portion 20 and the second member having a second deforming portion 12. As viewed in Figure 5, the right end of the deforming portion 20 constitutes a first end and the left end of the deforming portion 20 constitutes a second end with the first direction extending between the two ends. The first and second members 19, 11, respectively, are arranged to receive the material strip 31 in a second direction along the length of the strip material by virtue of the fact that the strip material 31 is moved into position between the first and second members and adjusted in the least in all directions of the horizontal plane to accurately locate the material strip within the first and second members. As shown in Figure 5, the first end of the first member 19 is closer to the second deforming portion 12 than the second end of the first member 19 is to the second deforming portion 12. The arc of the bend in the material strip 31 is made by bending the strip in a direction perpendicular to the first direction, as

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defined above. Clearly, the cross section of the strip is substantially maintained. As to claim 27, a second guide means 23 or 24 is provided that is adjacent the first or second deforming portions and protrudes beyond one of the deforming portions and towards the other deforming portion (see Figure 1).

Claims 32, 35-38, 41, 42 and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Mainiero (4,833,904). See the Figures where a portion of material strip 40 is deformed across the strip width by positioning the strip between two deforming members 84, 86, forwarding the portion of the strip and repeating the series of deforming and forwarding a plurality of times in a continuous manner. The material strip is compressed on one of its edges to a greater extent. Piston/cylinder 98 applies a greater force to one side of the strip 40 so as to curve the strip in a plane perpendicular to a first direction or direction of force applied to the strip. The cross sectional shape of the strip is "substantially maintained." Since the deformed shape is arcuate, it has a curve similar to a fan blade. Since the deforming portions of the first and second members are curved and the forces applied to the ends of the deforming portions are different, it is clearly inherent that the difference in compression will result in being non linear.

Claims 5, 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Creek (2,958,362). It is common to produce blades with a combination of flat/curve surfaces for specific blade uses within the turbine art. Accordingly such a provision within Creek's apparatus would have been obvious in light thereof for the noted reason. Also, removable dies are

common in the forging art so as to facilitate repair and replacement. Such a feature within Creek's apparatus would have been obvious for the noted motivation.

Claims 32 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Issagholian-Havai (6,643,930). See Figure 3 where the material strip 16 is curved by compressing one end of the strip more than the other end of the strip. The compression is linear because the deforming portions of the first and second member 34, 42 have straight contact surfaces. Clearly, the difference in compression is linear across the strip width. The deforming and forwarding are performed on a continuous basis.

INDICATION OF ALLOWABLE SUBJECT MATTER

Claim 44-46 and 48 are allowed.

INQUIRIES

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner D. Crane whose telephone number is (571) 272-4516. The examiner's office hours are 6:30AM-5:00PM, Tuesday through Friday. The examiner's supervisor, Mr. Derris Banks, can be reached at (571) 272-4419.

Documents related to the instant application may be submitted by facsimile transmission at all times to Fax number (571) 273-8300. Applicant(s) is(are) reminded to clearly mark any

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transmission as "DRAFT" if it is not to be considered as an official response. The Examiner's

Fax number is (571) 273-4516.

DCCrane
February 10, 2006

A handwritten signature in black ink, appearing to read 'D. Crane', with a large, stylized initial 'D'.

Daniel C. Crane
Primary Patent Examiner
Group Art Unit 3725